

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

CRANE CO. AND
DIXIE-NARCO, INC.

vs.

SANDENVENDO
AMERICA, INC., AND
ROYAL VENDORS, INC

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CASE NO. 2:07-CV-42-CE

MEMORANDUM OPINION AND ORDER

I. Introduction

Crane Co. and Dixie-Narco, Inc. (collectively, “Crane”) filed its complaint against SandenVendo America, Inc. (“SVA”) and Royal Vendors, Inc. (“Royal”) (collectively, “the defendants”) on February 6, 2007.¹ Crane accuses SVA of infringing three patents: U.S. Patent Nos. 6,230,930 (“the ‘930 patent”), 6,328,180 (“the ‘180 patent”), and 6,513,677 (“the ‘677 patent”). Crane accuses Royal of infringing only the ‘930 and ‘180 patents. This opinion resolves the parties’ various claim construction disputes. The court will address briefly the technology at issue in the case and then turn to the merits of the claim construction issues.

II. Background of the Technology

The ‘930 patent has an issue date of May 15, 2001. The ‘180 patent is a continuation-in-part of the ‘930 patent and has an issue date of December 11, 2001. The ‘677 patent is a continuation-in-part of the ‘180 patent and has an issue date of February 4, 2003. All three patents share the same specification and title, “Apparatus and Method for Vending Products.”

The abstract of the ‘930 patent describes the invention generally and states as follows:

An improved method and apparatus for vending products, and particularly beverage containers, of varied sizes, shapes and configurations without dropping

¹ Dixie-Narco, Inc. joined as a plaintiff in the amended complaint filed on May 30, 2007.

or subjecting the vended product to damaging impact forces are disclosed. The products to be vended are aligned in selectable ordered queues within a vending machine that can include a transparent front panel. A robotic carriage assembly using rack and pinion assemblies moves in positive non-vibratory manner along an X-Y plane in the machine, captures the selected product from its queue and smoothly transports the product to a product delivery port conveniently located close to hip level. The carriage assembly uses unique product escapement and capture mechanisms to smoothly slide the related product from its queue in to the carriage. Power door and safety lock features at the delivery port are also disclosed.

Across the three patents, Crane and SVA dispute approximately 14 terms, and Crane and Royal dispute approximately 19 terms. In some circumstances, the disputed terms overlap. Where applicable, the parties have categorized the disputed terms based upon similar issues. For the purposes of claim construction, the court will organize its analysis of the disputed claim terms and phrases in the same manner as addressed by the parties.

III. Discussion

A. General Principles Governing Claim Construction

“A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. A patent’s claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may

act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee’s claims. Otherwise, there would be no need for claims. *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This court’s claim construction decision must be informed by the Federal Circuit’s decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that “the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Id.* at 1312 (emphasis added)(quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of

the invention. The patent is addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, “represents an ongoing

negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence. That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims.

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The en banc court condemned the suggestion made by *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Id.* at 1319-24. The approach suggested by *Tex. Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of the claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors’ objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the

court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The parties dispute numerous terms. The court has attempted to address the terms in light of the disputes raised by the parties. The court now turns to a discussion of the disputed claim terms.

B. Specific terms in dispute

1. “upright standing manner” (or similar)

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
upright standing manner (‘930 - 1, 35; ‘180 - 36) standing upright manner (‘930 - 63) upright manner (‘930 - 35)	having a generally vertical orientation, corresponding to that of a beverage container or other product with any visible labels (or other markings) correctly oriented for marketing or selection	position with the bottom end resting on a surface without tipping and oriented perpendicular to that surface	

SVA and Royal seek a construction of these terms that would require a product, at all times, to be supported from its base with its bottom end resting perpendicular on a surface. The defendants take issue with Crane’s construction because they contend that it disregards the term “standing.” The court is not persuaded by SVA and Royal’s argument. A reading of the phrase in the context of the claim language and the specification as a whole does not suggest that the product must be, at all times, positioned as the defendants propose. This is especially true in light of the patents’ “robotic arm” embodiment, in which “a robotic arm [] grasps and lifts the

selected beverage container in to the carriage frame assembly,” and the patent’s alternate configuration in which, “[t]he beverage capture assembly further includes a . . . circular detent portion formed therein for retaining the bottom edge of a beverage container” ‘930 Patent, col. 14, ll. 32-34; col. 15, ll. 21-26 (emphasis added).

For its part, Crane seeks to define the term by the orientation of the product labeling. The court is not convinced that the terms should be defined in this way. Crane’s requirement that the labels be “correctly oriented” is divorced from the citations in the patent Crane relies upon for support. Each of the two citations to the specification and the one citation to the patent prosecution history discusses “visibility” of the labels, without mention of the their orientation. *See* ‘930 Patent, col. 1, ll. 57-67; col. 3, ll. 34-37; ‘930 Patent Prosecution History, Resp. dated Feb. 7, 2000, at 14-15.

Based on the claim language, read in light of the intrinsic record, the court defines “upright standing manner,” “standing upright manner,” and “upright manner” as **“having a generally vertical orientation, corresponding to that of a beverage container or other product.”**

2. “aligning . . . in registration”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
aligning ... in registration (‘930 - 1, 130; ‘180 - 1, 36)	moving into position to receive	making the floor portion of capture receptacle co-planar with floor portion of row so as to form a continuous sliding surface for the first-in-line product to slide from the open end of the tray and into the capture receptacle	making the floor portion of capture receptacle generally co-planar with floor portion of container tray

This phrase generally appears in the method step in which the capture assembly positions itself to receive a product from the queue. In general, the parties dispute the extent of precision

required by the patent claim language. Crane argues that the method step simply requires the robotic assembly to move into position to receive. Crane asserts that this construction adequately embraces all configurations, including the “robotic arm” embodiment. Furthermore, Crane asserts that the defendants’ proposed construction would run afoul of the doctrine of claim differentiation in light of dependent claims 4, 8, and 9, which disclose shelves arranged at an incline angle, as well as claim 125, which includes a “co-planar” limitation. The defendants rely on Crane’s recent arguments made during the reexamination of the ‘930 patent. They seek to require precise, co-planar positioning between the assembly and the beverage container queue. The defendants further argue that Crane’s construction is too vague and actually excludes the preferred embodiment.

The court agrees with Crane that the defendants’ proposed construction is too restrictive in light of the disclosed embodiments and dependent claims. Although unambiguous statements made during reexamination may, in certain circumstances, limit the scope of a claim, the patentee’s statement in this case does not rise to that level. *See On Demand Machine Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1338-39 (Fed. Cir. 2006). In this case, in response to a rejection during reexamination of the ‘930 patent, the patentee distinguishes the lack of precision alignment of a sliding embodiment of a prior art reference to the ‘930 patent’s precision alignment in a comparable embodiment. *See, e.g.*, ‘930 Patent, cl. 28; *see* Ex. 4 to SVA’s Resp. at 83. Crane’s statements do not amount to a clear and unmistakable disclaimer of claim scope to the extent suggested by the defendants. The remarks, for instance, state that “[t]he ‘930 Patent *suggests* vertical alignment between the beverage capture assembly 102 and the beverage trays 42 of between 1/32nd and 1/64th of an inch as *suitable* to ensure transfer without beverage container tipping.” *Id.* (emphasis added). This statement suggests that the alignment necessary

is that which would be suitable to prevent container tipping so as to preserve the overall object of the invention. Consequently, the court finds no disclaimer in the reexamination history that would suggest limiting each and every claim and embodiment in the manner requested by the defendants.

Despite the court’s disagreement with the defendants’ construction, Crane’s construction does not account for the “in registration” language of the limitation. The claim language, read in light of the specification and the statements in the prosecution history, suggest that the robotic assembly must be aligned vertically with the product. Accordingly, the court defines “aligning . . . in registration” (as used in claim 1 of the ‘930 patent) as **“moving the robotic assembly in the machine into a position vertically aligned with a customer selected one of said beverage container queues.”**

3. “robotic assembly”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
robotic assembly (‘930 - 1, 15, 20, 63, 130; ‘180 - 1, 36, 37)	mechanism whose movement and/or operation is guided by programmable automatic control(s)	machine consisting of a pair of horizontally mounted rail/rack assemblies, a vertically oriented shuttle bar that rides along the horizontal rails in the X-direction, a carrier frame that moves in the Y- (vertical) direction along the shuttle bar, and a transfer mechanism that is mounted to and moves with the carrier frame and operates in the Z- direction to remove product from a selected tray	

With respect to this term, the parties dispute whether the patent expressly defines the term. The relevant portion of the specification appears in the description of the preferred embodiment and reads as follows:

The robotic beverage capture and transport assembly generally includes a pair of horizontally mounted rail/rack assemblies, a vertically oriented shuttle bar that rides along the horizontal rails in the X-direction, a carrier frame that moves in the Y- (vertical) direction along the shuttle bar, and a pick-up or transfer

mechanism that is mounted to and moves with the carrier frame and operates in the Z-direction to remove a beverage container from a selected tray. ‘930 Patent, col. 11, ll. 54-62.

This citation is, generally, the construction proposed by the defendants.

Crane asserts a broader construction, citing a number of references in the specification in support, as well as a few extrinsic sources. One of the citations in the specification alludes to the ability of a controller to contain robotic path files. *See* ‘930 Patent, col. 19, l. 59 – col. 20, l. 4. A second reference in the specification discusses the use of “robotic principles to acquire a product to be vended” ‘930 Patent, col. 2, l. 56 – col. 3, l. 4. Despite these statements, the Summary of the Invention states that “[t]he invention uses an efficient, cost-effective, highly accurate, reliable and easily programmable robotic beverage capture assembly for capturing that beverage container selected by the customer. . . .” ‘930 Patent, col. 3, ll. 17-20. This passage of the portion of the specification appears to be referring to the robotic assembly more particularly described in the specification quoted by the defendants. In short, the court is persuaded that the robotic assembly of the invention is one that includes a pair of horizontally mounted rails, a vertically oriented shuttle bar that travels along the rails, and a carrier frame that moves vertically along the shuttle bar. Likewise, the robotic assembly must have a transfer mechanism to retrieve the selected product. Given the description of the robotic assembly in the specification, the court adopts a construction similar to what the defendants have proposed.

The court defines “robotic assembly” as a **“machine consisting of a pair of horizontally mounted rail/rack assemblies, a vertically oriented shuttle bar that rides along the horizontal rails in a horizontal direction, a carrier frame that moves in the vertical direction along the shuttle bar, and a transfer mechanism that is mounted to and moves with the carrier frame and operates to retrieve a selected product.”**

4. “to a delivery port” (or similar)

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
to a delivery port (‘930 - 1, 20, 130; ‘180 - 1, 36) to said delivery port (‘930 - 35, 145; ‘180 - 20(16), 26(16)) to said product delivery port (‘930 - 63) to the product delivery port (‘180 - 37)	in the direction of a delivery port (<i>see</i> def’n herein)	approaching and reaching a delivery port	all the way to the delivery port
delivery port (‘930 - 1, 20, 130; ‘180 - 1, 36) container delivery port (‘930 - 35, 145; ‘180 - 20(16), 26(16)) product delivery port (‘930 - 63; ‘180 - 37)	a region from which containers/beverages/products may be retrieved	the space into which the consumer reaches to access the vended product	an opening into the internal cavity of the vending machine through which the customer obtains the vended product

Claim 1 method step “e” of the ‘930 patent provides an example of the above phrases. The claim requires “carrying the transferred beverage container to a delivery port of the vending machine” ‘930 Patent, cl. 1 (emphasis added). The parties dispute the distance that the robotic assembly or beverage container must travel to meet the claim limitation. The answer to this question depends on (1) whether the claim limitation requires the movement of either the robotic assembly or beverage all the way “to a delivery port” and (2) whether “delivery port” refers to a general area or a more defined opening in the machine. The issues are interrelated. How far the robotic assembly or beverage must travel depends, in part, on the breadth of the construction of “delivery port.”² The court is not persuaded by Royal or SVA’s argument concerning “delivery port.” SVA agrees with Crane’s spatial concept, but would unnecessarily

² Crane agrees to a narrow construction of “to a delivery port” so long as the court adopts a broad construction of “delivery port.” SVA agrees to Crane’s construction of “delivery port” so long as the construction includes “by customers” at the end.

limit the delivery port to the area that the customer can reach. Under this construction, however, subsequent method steps in the claim would appear to be redundant. *See* ‘930 Patent, cl. 1 (“presenting the carried beverage container at the delivery port for customer removal from the vending machine” (emphasis added)). For its part, Royal defines “delivery port” in a structural manner. Royal’s construction, however, discounts the language of the specification that seems to define the product delivery port in more general terms. *See e.g.* 930 Patent, col. 3, ll. 22-23 (“carrying the captured container to a product delivery area or port.” (emphasis added)); *see also id.* at col. 1, l. 38, col. 2, l. 20, 61 (each discussing a “delivery area.”). Accordingly, the “delivery port” is more than a physical opening in the vending machine. The court defines “delivery port” (and related terms) as **“the area in the vending machine from which containers/beverages/ products may be retrieved by the customer.”**

The remaining issue is whether “to a delivery port,” means the same thing as “toward a delivery port.” The patentee explicitly chose different language in the claims, and the doctrine of claim differentiation counsels against adopting Crane’s construction. *Compare* ‘180 Patent, cl. 33 *with* ‘180 Patent, cl. 34. “To a delivery port” means that the product reaches the delivery port. “Toward a delivery port” means that the product simply needs to travel in the direction of the delivery port.

5. “dropping”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
dropping (‘930 - 20, 35, 63, 130, 145; ‘180 - 1, 20(16), 26(16), 37)	unconstrained free-fall; does not include sliding or other constrained or guided movement	releasing the product so that it is not supported on its bottom end and allowing it to descend by gravity	

Claim 20 of the ‘930 patent is exemplary of the usage of the disputed term:

c. removing a bottled beverage from said one of said ordered queues by means of a robotic assembly, in response to said customer selection input; and

d. smoothly moving said bottled beverage by said robotic assembly in a generally vertical X-Y plane within a vend selection space of the vending machine, to a delivery port of the machine; wherein said removing and moving steps are performed without dropping or subjecting the bottled beverage to sharp impact forces. (emphasis added).

The claim language requires the removing and vending steps to be performed “without dropping” the beverage. The question for the court is whether the patent’s use of the phrase “without dropping,” distinguishes a “free fall” from other events, such as sliding or rolling.

After hearing the arguments, the court concludes that Crane’s argument is persuasive. One of the stated purposes of the patents is to “address[] the described deficiencies of prior vending machines” ‘930 Patent, col. 3, ll. 5-6. One of the deficiencies is the vertical drop vending process. In describing the vertical drop vending process, the patents delineate between “vertically drop[ping] the beverage container from the front end of the shelf on which it is stored, to a lower chute” and “redirect[ing] the container to a delivery area” ‘930 Patent, col. 2, ll. 17-20; *see also id.* at col. 2, ll. (“virtually all vending machines that operate on the principle of dropping and delivering the vended product by gravity”). Furthermore, a preferred embodiment of the patent contemplates “enable[ing] beverage containers carried thereby to slide by gravity toward the open front” ‘930 Patent, col. 10, ll. 33-34; *see also id.* at col. 14, ll. 30-34 (describing the “robotic arm” embodiment”). Thus, the term “dropping” refers to **“an unconstrained free-fall, with no guidance.”**

6. “retainably removing”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
retainably removing (‘930 - 35, 145; ‘180 - 20(16), 26(16))	removing into a retained disposition	grasping and lifting into the carriage frame assembly the container from the container holder	

In construing this term, the defendants suggest that the claims at issue, claims 35 and 145 of the ‘930 patent and claims 20 and 26 of the ‘180 patent, use “retainably removing” to disclose only the “robotic arm” embodiment. Accordingly, they argue that the court should define the term in accordance with the “robotic arm” discussion in the specification. ‘930 Patent, col. 14, l. 33. Crane asserts that this is not the case, and that imposing such a limitation would unduly read out the “cup embodiment.”

The court agrees with Crane. Although each claim is not required to claim every embodiment, the structure of claims 35 and 57 in the ‘930 patent suggests that the claims are broader than the defendants contend. Claim 35 is an independent claim and requires “retainably removing.” Claim 57, which depends from claim 35 (and therefore requires “retainably removing” as well), reads as follows:

57. The vending machine of claim 35, including release means cooperatively connected with said container holding means and activatable by said beverage container capture means for releasing by gravity a selected container from said container holding means to said beverage container capture means. (emphasis added).

The language of claim 57 requires “releasing by gravity,” an action whose compatibility with “grasping and lifting” is not apparent. Accordingly, the court is unwilling to construe the term in the limiting manner proposed by the defendants..

The court, however, does not find Crane’s construction helpful. Crane’s construction simply rearranges the terms. As suggested by Crane’s recent statements made during reexamination of the ‘930 patent, “retainably removing” involves a level of control not disclosed by the prior art reference to the ‘930 patent. *See* Ex. 4 to SVA’s Resp. at 77.

For these reasons, the court defines “retainably removing” as **“removing the container from the container holder into the carriage frame assembly in a controlled manner.”**

7. “transferring”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
transferring/transferred (‘930 - 1, 15, 130; ‘180 - 1, 36)	plain meaning	moving through a distance toward the glass front of the vending machine	

Crane urges the court to refrain from construing the term, while the defendants propose a construction distinguishing between “transferring” and “carrying.” In light of the claim language and the various embodiments, the court finds it necessary to specifically distinguish the terms.

The court defines “transferring” and “transferred” as **“moving (or moved) through a distance.”**

8. “shelf”; “shelves”; “tray”; “trays”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
shelf/shelves (‘930 - 2; ‘180 - 20(18))	plain meaning	plain meaning	a continuous flat length of material fixed horizontally across the width of the inner cavity of the chassis used for holding multiple queues of products to be vended
tray/trays (‘180 - 1; ‘677 - 1)	plain meaning	plain meaning	a receptacle in the shape of a flat container with raised edges configured to contain a single queue of products to be vended and which is open at the dispensing end

As with “transferring,” Crane urges the court to adopt the plain meaning for “tray/trays” and “shelf/shelves.” The defendants disagree and ask the court to draw a distinction between trays and shelves. The defendants are correct that the patents make a distinction between “shelf” and “tray.”

As indicated by Figures 2 and 11 of the ‘930 patent, a “shelf” may comprise multiple “trays” and multiple beverage queues. A “tray,” on the other hand, comprises only one beverage queue. *See e.g.* ‘930 Patent, col. 3, ll. 16-19 (“Another difficulty associated with vending containers from ends of product trays . . . is the requirement of maintaining tight dimensional tolerances at the dispensing ends of the product holding trays.”); col. 3, ll. 65-66 (“at the dispensing ends of the product holding trays”); col. 5, ll. 30-32 (“invention further includes a plurality of trays for aligning the containers in their respective queues.”); col. 11, ll. 6-7 (“In the preferred embodiment illustrated, there are five such rows or shelves of the product trays.”) (emphasis added). The court is not persuaded, however, to give the terms the lengthy and structurally limiting construction urged by the defendants.

The court defines “tray/trays” as **“a receptacle configured to contain a single beverage or product queue.”**

The court defines “shelf/shelves” as **“a generally horizontal support structure for holding multiple trays or beverage or product queues.”**

9. “movement by gravity”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
movement by gravity (‘930 - 15)	plain meaning	only the mass of the container and gravity are used to move the container	

As with the previous two groups of terms, Crane urges the court to adopt the plain meaning for “movement by gravity.” The defendants assert that claim differentiation warrants the restriction of the patents’ use of “movement by gravity,” generally, to “movement only by gravity.” The defendants points to three claims in which the term “gravity” is used to move the beverage containers.

15. The method of claim 14, wherein the step of transferring one of the beverage containers from the selected container queue includes releasing said first-in-line container for movement by gravity into said robotic assembly.

57. The vending machine of claim 35, including release means cooperatively connected with said container holding means and activatable by said beverage container capture means for releasing by gravity a selected container from said container holding means to said beverage container capture means.

86. The vending machine of claim 85, wherein said robotic assembly is operable to remove said selected products from said at least one inclined queue by sliding said selected products with the help of gravity into said robotic assembly. ‘930 Patent, cls. 15, 57 & 86.

Generally, the defendants contend that the claims imply that the force of gravity may influence the movement of the product in varying degrees. In other words, because claims 57 and 86 include the terms “releasing” and “help of,” respectively, use of the term “movement” in claim 15 must mean that gravity alone causes the product to move into the robotic assembly.

The court is not persuaded. Nothing in claim 15 requires that gravity alone causes the product to move into the robotic assembly. And, the specification expressly states that “the principles of this invention do not require movement of the products . . . to be accomplished entirely by gravity.” This statement challenges the defendants’ construction. ‘930 Patent, col. 10, l. 46 (emphasis added).

For these reasons, the court rejects the defendants’ proposed construction that “movement by gravity” means “movement only by gravity.” The claim language needs no additional construction.

10. Disputed 35 U.S.C. § 112, ¶ 2 Terms and Phrases

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
severe impact forces (‘930 - 1, 130; ‘180 - 1)	impact forces having a magnitude sufficient to cause effervescence of carbonated beverages and/or damage to containers/products	indefinite under § 112(2) Plaintiffs are also estopped from asserting any construction of this term that would encompass the impact force shown in U.S. Patent No. 4,483,459 issued to Taylor or any other force that causes the contents of the container to shake.	
smoothly (‘930 - 20, 35, 63, 145; ‘180 - 20(16), 26(16), 37)	without perceptible wobble or jarring (<i>see</i> def’n herein)	indefinite under § 112(2)	
sharp impact forces (‘930 - 20, 35, 145; ‘180 - 20(16), 26(16))	impact forces sufficiently abrupt and intense to cause effervescence of carbonated beverages and/or damage to containers/products/ product packaging	indefinite under § 112(2) Plaintiffs are also estopped from asserting any construction of this term that would encompass the impact force shown in U.S. Patent No. 4,483,459 issued to Taylor or any other force that causes the contents of the container to shake.	
accurately moving (‘930 - 145; ‘180 - 26)	plain meaning	indefinite under § 112(2)	
jarring (‘930 - 63; ‘180 - 37)	subjecting to forces sufficient to cause effervescence of carbonated beverages and/or damage to containers/products	indefinite under § 112(2) Plaintiffs are also estopped from asserting any construction of this term that would encompass the impact force shown in U.S. Patent No. 4,483,459 issued to Taylor or any other force that causes the contents of the container to shake.	
rapidly (‘930 - 63; ‘180 - 37)	such that the entire vend process following customer selection completes within a customer-acceptable period of time	indefinite under § 112(2)	

The defendants argue that these terms are not amenable to construction and are therefore indefinite. 35 U.S.C. § 112, ¶ 2 requires that a patent specification “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112, ¶ 2. This definiteness requirement is satisfied “[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification.” *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). An issued claim is presumed valid under 35 U.S.C. § 282 and is not indefinite unless it “is insolubly ambiguous, and no narrowing construction can properly be adopted.” *Id.* Where “the meaning of the claim is discernable, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds.” *Id.*

In support of their indefiniteness argument, the defendants rely heavily on two Federal Circuit cases: *Geneva Pharms., Inc. v. Glaxosmithkline PLC*, 349 F.3d 1373 (Fed. Cir. 2003), and *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244 (Fed. Cir. 2008). Each will be discussed.

In *Halliburton*, the Federal Circuit reviewed the district court’s award of a summary judgment of invalidity due to indefiniteness. The claim term at issue in *Halliburton* was “fragile gel.” In its analysis, the Federal Circuit noted that *Halliburton* failed to “distinguish the fragileness of the . . . of the invention from the prior art” and “place any limit on the scope of what was invented beyond the prior art.” *Halliburton*, 514 F.3d at 1253. The court ultimately upheld the district court’s finding of invalidity. The court suggested that “[w]hen a proposed construction requires that an artisan make a separate infringement determination for every set of

circumstances in which the composition may be used, and when such determinations are likely to result in different outcomes . . . , that construction is likely to be indefinite.” *Id.* at 1255.

Under similar circumstances, the court in *Geneva Pharmaceuticals* also considered an indefiniteness issue. The claim term at issue in that case was “synergistically effective amount,” and the plaintiffs proposed construing it as “a formulation falls outside the scope of the claims if a given antibiotic, bacteria, and disease combination provides no synergy.” *Geneva Pharms.*, 349 F.3d at 1384. Geneva attempted to define the disputed term without identifying a specific bacteria, and the Federal Circuit rejected this argument, holding that “a given embodiment would simultaneously infringe and not infringe the claims, depending on the particular bacteria chosen for analysis.” *Id.*

For the reasons discussed below, the court concludes that “severe impact forces,” “sharp impact forces,” “accurately moving,” “jarring,” and “smoothly” are amenable to construction. The court concludes, however, that “rapidly” is indefinite.

a. “severe impact forces”

One of the patents’ stated goals is to overcome deficiencies of the prior art and to alleviate its associated problems, for example, “ruptured containers,” “explosive or overflow effervescence,” “damage to containers,” and “product leakage.” ‘930 Patent, col. 1, ll. 12-17; col. 2, ll. 12-45. To convey to one of ordinary skill in the art the claimed solutions to the above problems, the patentee chose to use descriptive terms like “severe,” “sharp,” “accurately,” “jarring,” “smoothly,” and “rapidly.”

The defendants’ primary complaint is that one of ordinary skill in the art would never know whether a particular vending machine infringed the patents-in-suit because, according to the defendants, the vending machine may infringe under certain circumstances, but may not

infringe under others. According to the argument, one cannot measure the severity of an impact by reference to the amount of resulting effervescence because the amount of effervescence depends in part on variables such as geography and atmospheric pressure. Although this concern is not without some force, the court is persuaded that the claims are nonetheless amenable to construction, given the language in the specification and the nature of the art. In short, one of skill in the art would understand the boundaries of the claim.

The claims of the patents-in-suit need not be measurable by an entirely objective standard. *Intertrust Techs. Corp. v. Microsoft Corp.*, 275 F. Supp. 2d 1031, 1046 (N.D. Cal. 2003); *but cf. Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1350 (Fed. Cir. 2005) (“The scope of claim language cannot depend solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention.”) and *Application of Musgrave*, 431 F.2d 882, 893 (1970) (noting that “[a] step requiring the exercise of subjective judgment without restriction might be objectionable as rendering a claim indefinite.”). To one of ordinary skill in the art, a construction may allow for both a subjective and objective determination of claim scope. *See Datamize*, 417 F.3d at 1350; *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986). Furthermore, even assuming that the patents did suggest an entirely objective test for measuring any of the above solutions to the prior art, under the defendants’ argument, the results of such tests would likely vary based on relative geographical locations and meteorological conditions. This would require a boundless amount of objective criteria and data in support of the claims. *See Orthokinetics*, 806 F.2d at 1576; *Datamize*, 417 F.3d at 1350.³

³ In *Datamize*, the court distinguished *Orthokinetics*, stating as follows:

In light of the language of the specification and the objects of the invention, the court defines “severe impact forces” as **“impact forces such as jarring, rolling, dropping, or tipping having a magnitude sufficient to cause immediate effervescence and overflowing of carbonated beverages upon opening, or damage to a container/product such that the container or product is no longer suitable for consumption or sale.”**

b. “sharp impact forces”

The court also agrees with Crane regarding the construction of “sharp impact forces.” The phrase “sharp impact force” connotes an abrupt or sudden impact force sufficient to cause the undesirable result of an overflowing beverage or a damaged product. *See* ‘930 Patent, col. 3, ll. 12-17; col. 24, ll. 46-56. The court therefore defines “sharp impact forces” as **“abrupt and sudden impact forces such as jarring, rolling, dropping, or tipping sufficient to cause immediate effervescence and overflowing of carbonated beverages upon opening, or damage to a container/product such that the container or product is no longer suitable for consumption or sale.”**

c. “accurately moving”

With respect to “accurately moving,” the surrounding claim language, along with the term’s plain meaning, provide adequate context for the claim. In claim 145 of the 930 patent, the relevant limitation reads “said transporter having an X-Y drive apparatus for accurately moving

The fact that the claims were intended to cover the use of the invention with various types of automobiles made no difference; we concluded that the phrase “so dimensioned” is as accurate as the subject matter permits since automobiles are of various sizes. Thus, in *Orthokinetics* we recognized that an objective definition encompassed by the claim term “so dimensioned” could be applied to innumerable specific automobiles. Although the patentee’s choice of terminology relies in part on the subjective opinion of one of ordinary skill in the art, the court finds that the specification and prosecution history provide enough context and support to allow the term to be construed. *Id.* (internal citation omitted).

said capture system in two orthogonal directions within said vend selection space.” The term “accurately moving” means **“moving in accordance with the vend control signal.”**

d. “jarring”

Turning to “jarring,” the specification discloses a vending process that is “achieved in a smooth continuous manner without . . . imputing any jarring blows or forces to the container.” *See e.g.* ‘930 Patent, col. 43, ll. 63-67. As with previous terms, the context provided by the claims and the specification adequately define the term. *See* ‘930 Patent, col. 24, ll. 46-56; col. 43, ll. 63-67.

The court defines “jarring” as **“striking the beverage container with sufficient force to cause immediate effervescence and overflowing of carbonated beverages upon opening, or damage to a container/product such that the container or product is no longer suitable for consumption or sale.”**

e. “smoothly”

In the context provided by the claims and specification, “smoothly” is capable of construction. *See* ‘930 Patent, col. 23, ll. 63-67; col. 24, ll. 46-56; col. 5, ll. 8-12. Considered along with the specification, the term “smoothly” simply means that the delivery is made in a controlled manner to overcome the problems with the prior art. Moreover, each instance of “smoothly” is also succeeded by a negative limitation incorporating one or more of the above terms already construed, providing additional context defining the scope of the claim.

For these reasons, the court defines “smoothly” to mean **“in a controlled manner.”**

f. “rapidly”

Unlike the above terms, “rapidly” is not amenable to construction. The term is entirely subjective and is judged purely from the consumer’s standpoint. *See Datamize*, 417 F.3d at 1347

(Fed. Cir. 2005) (finding indefinite a term that was “completely dependent on a person’s subjective opinion.”). Although Crane suggests that it may be possible to measure the average time of vending machines and then determine a competitively advantageous time, the patent does not disclose any such method. Absent a comparison method or a quantifiable method for measuring rate of time, the court is not persuaded that “rapidly” is amenable to construction.

11. Disputed 35 U.S.C. § 112, ¶ 6 Terms and Phrases

The parties dispute whether a number of phrases appearing in claims 35 and 145 of the ‘930 patent and claims 20 and 26 of the ‘180 patent are means-plus-function limitations. The defendants urge that each of these limitations uses purely functional language without any specific structure or material and are thus limited under 35 U.S.C. § 112, ¶ 6. Crane observes that none of the phrases uses the term “means,” and that many of the phrases were in fact amended during prosecution to remove the term “means.” According to Crane, the defendants have not overcome the presumption that these terms are not drafted according to 35 U.S.C. § 112, ¶ 6.

35 U.S.C. § 112, ¶ 6 provides that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof.” “A claim limitation that actually uses the word ‘means’ invokes a rebuttable presumption that § 112 ¶ 6 applies. By contrast, a claim term that does not use ‘means’ will trigger the rebuttable presumption that § 112 ¶ 6 does not apply.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002) (internal citations omitted). The “use of the term ‘means’ is central to the analysis,” *Personalized Media Comms., LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703 (Fed. Cir. 1998), because the term “means,” particularly as used in the phrase “means for,” is “part of the classic template for functional claim elements”

Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1427 (Fed. Cir. 1997), and has come to be closely associated with means-plus-function claiming. See *Apex, Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003).

The presumption that a limitation lacking the term “means” is not subject to § 112, ¶ 6 may be overcome if a party demonstrates that “the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *CCS Fitness*, 288 F.3d at 1369 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)). This presumption flowing from the absence of the term “means” is a strong one that is not readily overcome. See, e.g., *Al- Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1318-19 (Fed. Cir. 1999); *Personalized Media Comms.*, 161 F.3d at 703-05.

In several cases, the Federal Circuit and other courts have rejected arguments that claim limitations were drafted in means-plus-function form when the limitations did not use the word “means.” In *LG Electronics, Inc. v. Bizcom Electronics, Inc.*, 453 F.3d 1364, 1372 (Fed. Cir. 2006), *rev’d on other grounds sub nom, Quanta Computer, Inc. v. LG Electronics, Inc.*, 128 S.Ct. 2109 (2008), the Federal Circuit held that the term “control unit” in a claim reciting a “control unit for controlling the communication unit, wherein the control unit comprises a [central processing unit (‘CPU’)] and a partitioned memory system” was not a means-plus-function limitation because the claim recited sufficient structure for performing the stated function.

In *911EP v. Whelen Engineering Co., Inc.*, 512 F. Supp.2d 713, 726-27 (E.D. Tex. 2007), the court concluded that “controller” as used in a claim involving a warning signal light was sufficiently definite to avoid the application of § 112, ¶ 6, particularly when the claim language failed to use the term “means.” The court noted that the controller of the patent claim referred to

a specific type of circuit, and the Court of Appeals had held that “circuit” connoted sufficient structure to avoid application of § 112, ¶ 6. *See Massachusetts Institute of Technology and Electronics for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1355 (Fed. Cir. 2006) (“In two of our prior cases we concluded that the term ‘circuit,’ combined with a description of the function of the circuit, connoted sufficient structure to one of ordinary skill in the art to avoid 112 ¶ 6.”).

Similarly, in *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1361-62 (Fed. Cir. 2004), the court concluded that a limitation reciting “connector assembly for connecting each pair of adjacent support members” was not a means-plus-function limitation where the claim did not use the word “means,” and the word “connector” connoted a meaning of generic structure. The fact that the term was broad and might include almost an infinite number of structures did not render the limitation subject to § 112, ¶ 6. Against the backdrop of these decisions, the court now turns to the disputed terms.

a. “transporter . . .”; “controller . . .”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
a <u>transporter</u> operatively connected with said beverage container capture system for moving said beverage container capture system within said vend selection space in response to said vend control signal (‘930 - 35, 145)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> moving said beverage container capture system within said vend selection space in response to said vend control signal <u>Structure:</u> ‘930, 11:42-44; ‘930, 11:54-62; Figures 3, 4	

Disputed Claim Term or Phrase	Crane's Proposed Construction	SVA's Proposed Construction	Royal's Proposed Construction
a <u>controller</u> operatively connected with said capture system and with said transporter for producing and providing said vend control signal thereto to cause said capture system and said container holding means and smoothly carry said captured container in said upright manner through said vend selection space to said delivery port without dropping or subjecting said selected beverage container to sharp impact forces ('930 - 35)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> producing and providing vend control signals <u>Structure:</u> not provided and thus indefinite under § 112(2)	

During prosecution of the above phrases, claim 35 (and claim 145 with respect to “transporter . . .”) were amended to remove the § 112, ¶ 6 language. The patentee, however, did not make any other changes to the claim. With respect to “transporter . . .,” the patentee did not amend dependent claims 58 and 60, resulting in “transporter” providing the antecedent basis for “transport means.” Likewise, as to “controller . . .,” the patentee did not amend the patent’s corresponding dependent claims to remove the word “means.” The defendants seize on these failures to support their argument that § 112, ¶ 6 applies.

The court disagrees. Notwithstanding the failure to carry the amendments through to all of the limitations reciting the word “means,” the terms “controller” and “transporter” connote sufficient structure to avoid application of § 112, ¶ 6. The terms do not use the word “means,” and this gives rise to a presumption that the limitations are not drafted in means-plus-function form. The controller limitation provides additional functions performed by the controller, thus further defining the type of controller covered by the claim. Much like the circuit addressed in *Abacus* and the controller addressed in *911EP*, the term “controller” recites sufficient structure.

With respect to the term “transporter,” the court concludes that the analysis in *Lighting World* is applicable. The term “transporter,” although somewhat generic, implies that the

structure is a device which transports something else. Read in the context of the claim language, it is a device which is operatively connected to the capture system for moving the system in response to the vend control signal. The fact that a large number of devices may qualify as a “transporter” does not mean that the claim is drafted in means-plus-function form. The absence of the term “means” gives rise to a presumption that § 112, ¶ 6 does not apply. The defendants have not overcome that presumption in this case.

b. “beverage container capture system . . .”; “container holder . . .”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
a <u>beverage container capture system</u> for retainably removing one of said plurality of selectable beverage containers from said container holder in response to a vend control signal (‘930 - 35, 145)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> removing and carrying selected products from a queue <u>Structure:</u> ‘930, 14:35-15:33; Figures 9-10	
a <u>container holder</u> within said internal cavity configured to hold in a queue a plurality of selectable sealed beverage containers in upright standing manner (‘930 - 35)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> hold in a queue a plurality of selectable sealed beverage containers in upright standing manner <u>Structure:</u> ‘930, 11:14-39; ‘930, 9:40-49; Figure 4	

The prosecution amendment of these phrases are similar to that of the previous phrases—“beverage container capture system” in claim 35 serves as the antecedent basis for “beverage container capture means” in claims 46, 47, 57, 58, 60, and 61 of the ‘930 patent, and “container holder” in claim 35 serves as the antecedent basis for “container holder means” in step (e) of claims 35, 41, 46, 57, and 58. Like the preceding phrases, however, these phrases are sufficiently descriptive. *See* ‘930 Patent, cl. 35, steps c-e (indicating that the “beverage container capture system” is operatively connected to a transporter and a controller; it is further capable of

responding to a signal from the controller, capturing a beverage container from the container holder, and carrying it through the vend selection space to the delivery port); col. 28, ll. 42-47 (indicating that a “container holder” is a physical structure located in the internal cavity that physically forms at least one boundary of the vend selection space and is configured to hold a queue of beverage containers in an upright standing manner). The specification also provides a number of examples of the “beverage container capture system” and the “container holder.” *See* ‘930 Patent, col. 9, ll. 40-49; col. 11, ll. 42-44; col. 14, ll. 30-39.

For these reasons, the court concludes that the terms are not subject to § 112, ¶ 6.

c. “supports for . . .”; “a reinforcement structure . . .”

Disputed Claim Term or Phrase	Crane’s Proposed Construction	SVA’s Proposed Construction	Royal’s Proposed Construction
<u>supports</u> for operatively mounting said trays within said vending machine (‘677 - 1)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> fixing orientation of trays during movement into anchored position within vending machine <u>Structure:</u> ‘677, 23:16-22, 53-63; Figures 2-4, 25, 26	[not asserted against RV]
a <u>reinforcement structure</u> secured to said trays adjacent said dispensing ends thereof for maintaining dimensional width tolerances across the dispensing end of the tray in a manner that prevents bending distortion of the tray at said dispensing end thereof (‘677 - 1)	not subject to § 112(6) plain meaning	subject to § 112(6) <u>Function:</u> preventing a change in the inside spacing dimension between sidewalls of a tray <u>Structure:</u> ‘677, 18:8-10, 51, 51-60; Figures 22-25	[not asserted against RV]

As with the previous phrases, these phrases describe sufficient structure. *See* ‘677 Patent, cl. 1 (“within said vending machine such that the dispensing ends of said trays are aligned generally within a vertical plane adjacent said front panel of the vending machine . . . secured to

said trays adjacent said dispensing ends thereof for maintaining dimensional width tolerances across the dispensing end of the tray in a manner that prevents bending distortion of the tray at said dispensing end thereof.”). The claim language does not use the term “means,” and the court concludes that “supports for operatively mounting said trays within said vending machine” and “a reinforcement structure secured to said trays . . .” are not subject to § 112, ¶ 6.

IV. Conclusion

The court adopts the above definitions for those terms in need of construction. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the court.

SIGNED this 5th day of June, 2009.


CHARLES EVERINGHAM IV
UNITED STATES MAGISTRATE JUDGE